W	ork	Or	deı	• I	D	12	25	22	7
	_	_	_						_

Work Ord Tuesday, Octob				*125	5クク7*							Page 1
Item ID: Revision ID: Item Name:	D3391-021 Fwd Tube As			Accept	*N900	040	1100)*	Setup	Start Stop		S1* S2*
Start Date: Required Date: Reference:	10/06/14 : 10/06/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:						
Approvals:		lan: MC3	Date: <u>14-10-08</u>	Tooling: _ SPC (Y/N):		ate:			Run	Start Stop	"I VI	R1* R2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Re Qt		Reject Number	Insp. Stamp
Draw Nbr	Re	vision Nbr										
D3391	I											
100 *1		Skidtubes Memo		0.00			1	D) _/	14-1	10-,	14
Skidtubes		Cut as per	dwg.									·
*110 *11 0 *		BENDING MACHINE	- SKIDTUBES	0.00				. ,	_	~	BE 11 h	-10-15
CNC Bend 1 CNC Delta 100 Ber	nder	Memo Bend as pe	т Dwg D3391 Using Bend Pr	0.00 og 3391021					<u>E</u>	<u> </u>	<u> </u>	-1070
120		QC5- Inspect part comp	oleteness to step on W/O	0.00					\bigcap			
120		Мето	• • •	0.00			DAS 03 9-89	1		<i>H</i>	-10	38 9-89
Quality Control .		6.75	0 "									

DQA:			Date:											TO A C
						WORK OF	RDER NON	-CC	ONFOR	RMANCE / I	UPDATE			A E R O S P A C E
QA Closed:			Date:								\	Nork Order u	odate only	
Work Orde	er:					DISPO	SITION			-	AGAINST [DEPARTMENT	/PROCESS	
							Rework]		Skid-tube	Crosstube		Water Jet	Engineering
Part N	10.					· !	Scrap	↓ ┃		Machining	Small Fab	_	d. Eng. Coor.	Quality
							Use-as-is		1	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	۱٥.					Suspected Un	approved			Large Fab	Composite _		Supplier	
Root					Desci	ription of work o	rder update	1	nitial	А	ction	Sign &		
Cause		Date	Step	Qty		or non-conforr	nance	Ch	ief Eng	Des	scription	Date	Verification	QC Inspector
Design													:	
Doc/Data														
Equip/Tooling														
Handling/Pre								-	i					
Material														
Operator														
Offset/Setup														
Process														
Supplier Training													<u> </u> -	
Transport														
Unapproved														
опаррточеа			1	l	L			FΔI	JLT CAT	FGORY			L	
Landi	ng (Gear				Genera			oe: cri		/ /			
		Bending				Bend	•		Folio/P	rogram		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route			Grain			Over/Under		Set-up
		Cracks				Broken/Damag	e/Defect	\vdash	Hardwa	re		Part Incorre	<u> </u>	Temperature/Cure
		Crimp/Kir	nk/Ripple,	/Wave		Burrs			Inspecti	on Incomplete/	Unqualified	Part Lost/M	issing	Weld
		Crimp/Kink/Ripple/Wave Cuffs			Contamination			Instructi	ions Incomplete	e/Unclear	Part Moved		Wrong Stock Pulled	
		Crushing			Countersink		_		ned/off center	_	Positioned \			
1.		⊣		Cut Too Short			Mislabe	led		Power Loss/	Surge	Other		
1		Inspection Strip in Tube		Drawing	•		Misread	I	_					
					Drill Holes			Off-set						
		Turning S	equence			Finish			Out of C	Calibration				
		Wave/Tw	ist in Tub	e		Fit/Function			Out of S	iequence				

Tuesday, October 07, 2014 10:38:35 AM

Item ID: Revision ID: Item Name:	D3391-021 Fwd Tube Ass	sembly		Accept	*N900	04 0	100)* s	Setup Star	·· [X],	S1* S2*
Start Date: Required Date: Reference:	10/06/14 10/06/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item II Customer:	D:					
Approvals:		n:	Date:	Tooling: SPC (Y/N):	, <u></u>	nte:		R	kun Stai Stoj	^ \	R1* R2*
Sequence ID/ Work Center II 130 *130*)	Operation Description HAAS CNC VERTICAL	. MACHINING #1	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
HAAS 1 HAAS CNC vertical	machine #1	Memo 1-Machine a Rev. 44& Identify as D 2-Deburr	s per Folio FA590 Dwg D3391 Rev	0.00	Tul 14/10/2	27					
140 *1 4 n* QC Quality Control		QC2- Inspect parts off m Memo	achine FAI/FAIB	0.00	LIU 10/2	7			<u>B</u>		
150 *150* Mill Conv Conventional Millin	g Machine	CONVENTIONAL MILL Memo Drill X1 Aft	LING MACHINE cap as per Dwg D3391	0.00 0.00 1875" dia					Ø		J.CL.

DQA:			Date:			WORK ORDER NON		NIE ()	DNANCE / I	IDDATE			DART
QA Closed:			Date:			WORK ORDER NOW		JIVFOI	NVIANCE / C		Vork Order up	date only	AEROSPACE
Work Orde	r:					DISPOSITION				AGAINST D	EPARTMENT,	PROCESS	
Part N	lo		e Marie Train - Marie			Rework Scrap Use-as-is Suspected Unapproved		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root		-51-116			Desci	ription of work order update		nitial	A	ction	Sign &		
Cause		Date	Step	Qty		or non-conformance	1	ief Eng		cription	Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved						-		•					
							FA	JLT CAT	regory				
Landir	$\overline{}$					General		ı		_	_		
	Landing Gear Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter				Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes		Grain Hardwa Inspecti Instruct	ion Incomplete/Uions Incomplete, Ined/off center	/Unclear	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned W Power Loss/S	tolerance ct ssing /rong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other	
	anding Gear Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wav Cuffs Crushing Heat Treat Inspection Strip in Tube				Finish	-	ì	Calibration					
	anding Gear Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wa Cuffs Crushing Heat Treat Inspection Strip in Tub Marks/Chatter Turning Sequence					Fit/Function	\vdash	1	Sequence				

Work Orde Tuesday, Octobe				*12!	5227*						Page
Revision ID:	D3391-021 Fwd Tube Ass	sembly		Accept	*N900	040	100)*	Setup Sta	17	S1* S2*
Start Date: Required Date: Reference:	10/06/14 10/06/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item :	ID:				, ,	
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):		ate:			Run Sta Sto	~! <i>\</i> J	R1* R2*
Sequence ID/ Work Center ID 160		Operation Description QC2- Inspect parts off m	achine FAI/FAIB	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
1 60 QC Quality Control		Мето		0.00					Ø		J.C. 12 14/10/131

170

QC8- Inspect parts - second check

0.00

170 _{QC}

0.00 Memo

Quality Control

DQA:			Date:			WORK ORDER NON	~	281521		LDDATE			DART
QA Closed:			Date:			WORK ORDER NON	-((JNFO	RIVIANCE		ork Order up	odate only	AEROSPACE
Work Orde	er:					DISPOSITION				AGAINST DI	EPARTMENT,	/PROCESS	
Part N	_					Rework Scrap			Skid-tube Machining	Crosstube Small Fab	⊣	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	lo					Use-as-is Suspected Unapproved		Thern	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root					Desc	ription of work order update		Initial	А	ction	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Des	cription	Date	Verification	n QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved						· ·			n				
					1		FA	ULT CAT	TEGORY				
Landir		ear Bending Centre No Cracks Crimp/Kir Cuffs Crushing Heat Trea nspection Marks/Ch	ık/Ripple t n Strip in	/Wave		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes		Grain Hardwa Inspecti Instruct	on Incomplete/ions Incomplete ned/off center	/Unclear	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct ssing Vrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	_	Furning So Wave/Tw	equence			Finish Fit/Function		Out of 0	Calibration Sequence				

Tuesday, October 07, 2014 10:38:35 AM

Tucsuny, Octobe		10.36.33 AM										
Item ID: Revision ID:	D3391-021			Accept	*N900	040	100)* s	Setup Sta	1 /1	S1*	
Item Name:	Fwd Tube As	sembly							Sto	p *N	S2*	
Start Date:	10/06/14	Start Qty: 1.00	*1	*	Cust Item l	D:						
Required Date:	10/06/14	Req'd Qty: 1.00	*1	k	Customer:							
Reference:			-									
Approvals:	Process Pla	an:	Date:	Tooling:	D:	ate:	_	F	Run Sta	~1/1	R1*	
	QC:		Date:	SPC (Y/N):	D:	ate:			Sto	*N	R2*	
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	_
180		Skidtubes		0.00								
120 Skidtubes				0.00	_							
Skidtubes			aining two holes for in previous step	0.00 tow cap using DT 8819 Locating	g off of .1875"							
		holes to finis		g D3391 using DT8798(Do not ED "A")	open tow cap	Da	s	14-11-	7			
		3-Open tow	cap holes to .208" a	s per Dwg D3391				•				
		4-Open Tow	Ring hole to .640"	as per Dwg D3391								
	•	5- open floa	t bag holes 0.328" an	d counter sink as per dwg D339)1							
		6-Deburr &	Scribe Batch numbe	r Inside aft end.	\mathcal{I}_{α}							
		NO WE	Irill D3391-021 with ARPLATE HOLES A BATCH # 12 50	ARE TRANSFER DRILLED	200	14-	11-	12				

DQA:		S	Date:			WORK OR	DED NION	cc	NIE∩!	RMANCE / U	IDDATE			DART
QA Closed:			Date:			WORK OR	DEK NON	-00	JINFOR	KIVIAINCE / C		/ork Order up	odate only	AEROSPACE
Work Ord	er:					DISPOS	SITION				AGAINST D	EPARTMENT,	/PROCESS	
Part I	No.					Suspected Una	Rework Scrap Use-as-is approved		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Desci	ription of work or	rder update		nitial	A	ction	Sign &		
Cause		Date	Step	Qty		or non-conform	·		ief Eng	l	cription	Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved									0				Vermeditori	de inspector
	1		•	*	^			FAI	JLT CAT	EGORY		1		- 198 1 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -
Landi	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat				General Bend BOM/Route Broken/Damage Burrs Contamination Countersink Cut Too Short			Grain Hardwa Inspecti Instruct	ion Incomplete/Uions Incomplete Ined/off center	/Unclear	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned W	tolerance ct ssing Vrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other	
		1	•	Tube		Drawing		\vdash	Misreac		L	_		
	Inspection Strip in Tube Marks/Chatter			Drill Holes	,		Off-set							
		Turning S				Finish		\vdash		Calibration				
		Wave/Tw	ist in Tub	e		Fit/Function			Out of S	Sequence				

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Work Orde				*125	5227*		_				Page 5
Item ID: Revision ID: Item Name:	D3391-021 Fwd Tube As	ssembly		Accept	*N900	040	100)*	Setup Sta	17	S1* S2*
Start Date: Required Date: Reference:	10/06/14 10/06/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:		,	Q.	-	
Approvals:	Process Pla	an:	Date:	Tooling:	Da	ate:]	Run Sta	^IV	R1*
	QC:		Date:	SPC (Y/N):	Da	ate:			Sto	*N	R2*
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept	Reject Qty	Reject Number	Insp. Stamp
¹⁹⁰ *1 0 0*	·	QC5- Inspect part compl	eteness to step on W/O	0.00				1			. DAS
QC Quality Control		Memo		0.00					•		- - 9-89 14-//-(
200		Chemical Conversion Co	oat per QSI005 4.1	0.00							
200 HandFinish Hand Finishing		Memo		0.00							-17 DGC

210

210

Quality Control

QC7-Inspect Chemical Conversion Coat

Memo

0.00

0.00

DAS OLER

14-11-17

DQA:			Date:		· · · · · · · · · · · · · · · · · · ·								
						WORK ORDER NON	-C(ONFO	RMANCE / L			_	AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	
Work Ord	er:					DISPOSITION	,			AGAINST DE	PARTMENT	PROCESS	
Part f NCR I وشطح						Rework Scrap Use-as-is Suspected Unapproved		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Desci	ription of work order update	- 1	nitial	Ad	ction	Sign &		
Cause		Date	Step	Qty	1000	or non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved			. •										
	.		I	1			FAI	ULT CAT	EGORY		اــــــــــــــــــــــــــــــــــــ		
Landi	ng (Gear				General		-		•			
	$\overline{}$	Bending Centre No Cracks		•		Bend BOM/Route Broken/Damage/Defect		Grain Hardwa	•		Outside Dime Over/Under Part Incorrec	tolerance	Pressure/Forced Set-up Temperature/Cure
	_	Crimp/Kin	ik/Ripple	/Wave	<u> </u>	Burrs	<u> </u>	i '	on Incomplete/U	·	Part Lost/Mi		Weld
	-	Cuffs				Contamination	<u> </u>	1	ions Incomplete,		Part Moved	<u> </u>	Wrong Stock Pulled
		Crushing Heat Trea			-	Countersink Cut Too Short	_	Misalig Mislabe	ned/off center led		Positioned W Power Loss/S		Other
	Inspection Strip in Tube			Drawing	-	Misread			J. 5.1.51 2000/5		1		
	Inspection Strip in Tube Marks/Chatter			Drill Holes	\vdash	Off-set	-						
		Turning Se				Finish		ŧ	Calibration		<u></u>		
		Wave/Tw				Fit/Function		1	Sequence				

Work Orde Tuesday, Octobe				*129	5227*						Page 6
Item ID: Revision ID:	D3391-021			Accept	*N9000	040	100)*	Setup St	art *N	S1*
Item Name:	Fwd Tube Ass	sembly							St	op *N	S2*
Start Date: Required Date: Reference:	10/06/14 10/06/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item II Customer:):					• • •
Approvals:	Process Pla	nn:	Date:	Tooling:	Dat	te:	_]	Run St	art *N	R1*
	QC:		Date:	SPC (Y/N):	Dat				St	° *N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 *? ? ? ? ! ! ! ! ! ! ! ! ! !		Skidtubes		0.00	_						
Skidtubes		A/R Magna exp. date: /	ers as per dwg D3391 abond 6398 batch: <u>6</u> 4-12-3 <u>0</u> hrs. as per QSI015	29172	14-11-	17					
		2- grind cros 3-back drill	sbolt flush crossbolt if necessary	> DP	14-11-	B		i			
230		QC5- Inspect part compl	eteness to step on W/O	0.00				1			DAS
230 QC Quality Control		Memo		0.00							38 - 9-89 7/ - 7

235

Pressure Wash per QSI005 4.3

0.00

235
HandFinish

0.00

Hand Finishing

Memo AND REALODINE AS PER QSI 005

DQA:		Date:										7	
		Data			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE		(. O (1	AEROSPACE
QA Closed:		Date:					,		VV	ork Order up	date only		«
Work Order	·:				DISPOSITION			AGAINST	DE	PARTMENT,	/PROCESS		
					Rework	1		Skid-tube Crosstube			Water Jet		Engineering
Part No	٥.				Scrap			Machining Small Fab	-	Pro	d. Eng. Coor.	╗	Quality
					Use-as-is		Therr	noforming Finishing		Rec/Sto	re/Packaging		Other
NCR No	O				Suspected Unapproved		i	Large Fab Composite			Supplier		
Root				Desci	ription of work order update		nitial	Action		Sign &	. ,		· · · · · · · · · · · · · · · · · · ·
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	١	QC Inspector
Design							-						·
Doc/Data													
quip/Tooling													
Handling/Pre												ŀ	
Material													
Operator													
Offset/Setup													
Process													
Supplier													
Training				:									
Transport													
Jnapproved		<u> </u>											
\$4						FAI	ULT CA	TEGORY					
Landing	 1				General		1			1	-		
_	Bending				Bend	<u> </u>	•	Program	<u> </u>	Outside Dim	<u>}</u>		Pressure/Forced
-	Centre No	ot Conce	ntric		BOM/Route	<u> </u>	Grain			Over/Under	}		Set-up
_	Cracks				Broken/Damage/Defect	<u> </u>	Hardwa		<u></u>	Part Incorre	<u> </u>		Temperature/Cure
_	Crimp/Kir	nk/Ripple	:/Wave	<u> </u>	Burrs		1	ion Incomplete/Unqualified		Part Lost/Mi	ssing		Weld
<u> </u>	Cuffs				Contamination		1	tions Incomplete/Unclear	<u></u>	Part Moved			Wrong Stock Pulled
-	Crushing				Countersink		1	gned/off center		Positioned V			
<u> </u>	Heat Trea				Cut Too Short		Mislabe			Power Loss/	Surge		Other
<u> </u> _	Inspection		Tube		Drawing	<u></u>	Misread						
L	Marks/Ch				Drill Holes	<u></u>	Off-set						
<u> </u>	Turning S				Finish		1	Calibration					
-	Wave/Tw	ist in Tul	oe		Fit/Function		Out of	Sequence					

W	ork	Order	ID	125227
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125227

Page 7

Tuesday, October 07, 2014 10:38:35 AM Item ID: D3391-021 Accept *N900040100* Start Setup **Revision ID:** Fwd Tube Assembly **Item Name:** *1* Start Oty: 1.00 **Start Date:** 10/06/14 **Cust Item ID:** Required Date: 10/06/14 Reg'd Otv: 1.00 *1* **Customer:** Reference: Run Start **Process Plan: Approvals:** Date: Tooling: Date: Stop QC:_ Date: _____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool # Plan **Tool ID** Reject Reject Accept Insp. **Work Center ID Description Run Hours** Code Qty Qty Number Stamp White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum 240 0.00 *240* Powdercoat 0.00 Powder Coating 250 QC3- Inspect Part Finish 0.00 *250* 0.00 Memo **Quality Control** 254 Assemble as per dwg 0.00 *95/1* HandFinish 0.00 Memo Hand Finishing

DQA:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE								
QA Closed:			Date:			WORK ORDER NON	-C(DNFO	RIMANCE / U		/ork Order up	odate only	AEROSPACE	
Maril Ond						DISPOSITION				AGAINST D	EPARTMENT,	PROCESS		
Work Orde	er:					Davisali	,		المارية المثارة	C	_	Water Jet		
Part N	do					Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	d. Eng. Coor.	Engineering Quality	
laiti	٠.	- 1.49				Use-as-is	1		noforming	Finishing		e/Packaging	Other	
NCR N	۱o. ِ					Suspected Unapproved			Large Fab	Composite	- Necyston	Supplier		
Root					Desci	ription of work order update		nitial	Ad	ction	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector	
Design						N N								
Doc/Data														
Equip/Tooling														
Handling/Pre														
Material 🧳						•								
Operator											•			
Offset/Setup														
Process	\square						1							
Supplier	-													
Training														
Transport														
Unapproved			,	<u>. </u>			<u> </u>	UT CAT	TECODY.	· · · · · · · · · · · · · · · · · · ·				
Landi							FAI	ULI CAI	regory					
Landi		Bending				General Bend		ا دمانه (۵		<u></u>	70	: Г	70	
		Centre No	ot Conson	stric		BOM/Route	-	Grain	rogram	-	Outside Dim Over/Under	<u> </u>	Pressure/Forced	
		Cracks	or concer	ICIIC	-	Broken/Damage/Defect	⊢	Hardwa	ro.	-	Part Incorred	⊢	Set-up	
	-	Crimp/Kir	k/Rinnla	Mayo	ļ	Burrs	-	ł	ire ion incomplete/l	Inqualified	Part Incomed	-	Temperature/Cure Weld	
í		Cuffs	(M)MPIE	, wave	-	Contamination	\vdash	1	ions Incomplete,	· · · -	Part Moved	<u>-</u>		
	Н	Crushing			-	Countersink	\vdash	1	ned/off center	 	Positioned W	_	Wrong Stock Pulled	
	_	Heat Trea	ıt		\vdash	Cut Too Short	-	Mislabe			Power Loss/		Other	
	-	Inspection		Tuhe	}	Drawing	-	Misreac		L.	_11 OWE1 20337.	L L	Tottlei	
	_	Marks/Ch			-	Drill Holes	<u> </u>	Off-set				.		
ļ		Turning S				Finish		ł	Calibration					
		Wave/Tw	•			Fit/Function		ł	Sequence					

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Work Orde				*12!	5227*						Page 8
Item ID: Revision ID: Item Name:	D3391-021 Fwd Tube As	sembly		Accept	*N900	<u>)</u> 040	1100)*	Setup Sta	1 /1	S1* S2*
Start Date: Required Date: Reference:	10/06/14 10/06/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item Customer:					-	• • •
Approvals:	Process Pla	an:	Date:	Tooling:	D	ate:]	Run Sta	^{rt} *N	R1*
	QC:		Date:	SPC (Y/N):		ate:			Sto	^p *N	R2*
Sequence ID/ Work Center II 256 *256*)	Operation Description QC5- Inspect part compl	eteness to step on W/O	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp DAS 38
QC Quality Control		Memo		0.00				- (14-12-0
260 *260* Packaging Packaging		Identify as per dwg & Sto	ock Location: WO	0.00 ما (۷ - ۲	742-043/B	12641	3	1x	<u></u>	Il	<u>idlez</u> lo

0.00

0.00

280

Quality Control

QC21- Final Inspection - Work Order Release

Memo

14/12/44 Au(-12-04

DQA:			Date:										•	NA RT
						WORK ORDER NON	-C(ONFO	RMANCE / L					AEROSPACE
QA Closed:	-		Date:								/ork Order up	date only		
Work Orde	or:					DISPOSITION				AGAINST D	EPARTMENT,	/PROCESS		
	_					Rework	1		Skid-tube	Crosstube	٦	Water Jet		Engineering
Part N	No.					Scrap		,	Machining	Small Fab	Pro	d. Eng. Coor.		Quality
	_					Use-as-is			noforming	Finishing	⊣	e/Packaging		Other
NCR N	No.					Suspected Unapproved								
						L	1			•			_	
Root					Desci	ription of work order update	1	Initial	Ac	ction	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Desc	ription	Date	Verification	<u>n</u>	QC Inspector
Design	_													
Doc/Data														
Equip/Tooling	Щ													
Handling/Pre														
Material .	Ш													
Operator	Ш													
Offset/Setup														
Process														
Supplier														
Training							1							
Transport						,								
Unapproved														
							FA	ULT CAT	EGORY					
Landi	ng Ge	ear				General		,		_	_			•
	L	Bending				Bend		Folio/P	rogram	L	Outside Dim	ensions		Pressure/Forced
		entre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance		Set-up
:		Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorred	ct [Temperature/Cure
		rimp/Kir	ık/Ripple	/Wave		Burrs		Inspecti	on Incomplete/U	Inqualified	Part Lost/Mi	ssing		Weld
		Cuffs				Contamination		Instruct	ions Incomplete/	'Unclear	Part Moved			Wrong Stock Pulled
		Crushing				Countersink		Misalig	ned/off center		Positioned V	Vrong		
	F	leat Trea	t			Cut Too Short		Mislabe	eled	Γ	Power Loss/	Surge		Other
		nspectio	n Strip in	Tube		Drawing		Misread	1					
		Marks/Ch	atter			Drill Holes		Off-set						
	ו	urning S	equence			Finish		Out of 0	Calibration					
		Vave/Tw	ist in Tub	e		Fit/Function		Out of S	Sequence					

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Picklist Print

Tuesday, October 07, 2014 10:38:35 AM

Work Order ID: 125227

125227

Parent Item:

D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 10/06/14

Required Date: 10/06/14

Page 1

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.09.13New issue

KJ/JLM

IPP B06.02.10Dwg rev.D ecn 773 EC

IPP C06.05.02Added inspections EC

IPP D 07.03.13 rev F dwg

EC

IPP E 07.11.07 revG dwg ecn1053P EC verified by: DD

IPP Rev:f ECN 1056 07-11-12 DD verified by: EC

IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC

IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC

IPP Rev I 09.02.02 added hardware EC verifified by: DD IPP Rev:J

11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4095-051		Manufactured	No				Each	27.0000		1	^		
D4095-09	51								**		ول ر	listo	2
				Location	:	Loc	<u>Oty</u>	Loc Code					
				FP001			27				_		
					116096		15		_	۷١			
					120520		12		_		_		
D6013-047		Manufactured	No			100	Each	157.0000	1	1			
D6013-04 Skidtube Material	47								** 7	M	14-	10-	14
				Location		Loc	<u>Oty</u>	Loc Code			• •	, _	
				LG003			157				_		
					72505		35				_		
					86064		122		[1)	_		

DQA:			Date:												MOT
	WORK ORDER NON-CONFORMANCE / UPDATE Ped: Date: Work Order update only											ب	AEROSPACE		
QA Closed:			Date:	<u> </u>							Woı	k Order up	date only		
Work Orde	er:					DISPOSITION				AGAINST	DEP	ARTMENT	/PROCESS		
	_			•••		Rework	1		Skid-tube	Crosstube			Water Jet	Engi	neering
Part N	No					Scrap		ſ	Machining	Small Fab		Pro	d. Eng. Coor.		Quality
						Use-as-is		Therm	noforming	Finishing		Rec/Stor	e/Packaging		Other
NCR N	۰ ۱۵۰	·		··········		Suspected Unapproved			Large Fab	Composite			Supplier		
Root					Desci	ription of work order update		Initial	Ac	ction		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Desc	cription		Date	Verification	QC	Inspector
Design	Ц														
Doc/Data														ļ	
Equip/Tooling														1	
Handling/Pre															
Material															
Operator															
Offset/Setup															
Process															
Supplier															
Training _															
Transport	\dashv														
Unapproved			<u> </u>	<u> </u>											
l a walio							FAI	ULT CAT	EGORY						
Landir [General]:_/D		1			. г	٦.	/5
	-	Bending Centre No	t Canaan	a de la companya de		Bend BOM/Route	⊢	1	rogram		${f H}$	Outside Dim	<u> </u>		re/Forced
	$\overline{}$	Cracks	or concer	itric	-	Broken/Damage/Defect	⊢	Grain		ł		Over/Under	-	Set-up	
	-	Crimp/Kir	ık/Binnla	Mayo	-	•	 	Hardwa		to accept the ad	-	Part Incorrec	⊢		rature/Cure
		Cuffs	ry nippie,	, wave	-	Burrs	⊢	1	on Incomplete/U	· ·	\vdash	Part Lost/Mis	ssing	Weld	Charl Dalland
}	-	Crushing			_	Contamination Countersink	\vdash	4	ions Incomplete/		⊢	Part Moved	/rana	wrong	Stock Pulled
ŀ	_	Heat Trea	+		-	Cut Too Short	\vdash	Mislabe	ned/off center		—	Positioned W		Jother	
}	-	nspection		Tube	-	Drawing	\vdash	Misread		l	' لـــا	ower Loss/S	ourge [_	Other	
}		Marks/Ch		Tube	-	Drill Holes	_	Off-set	I		_				
}		Turning S			-	Finish	<u> </u>	ł	Calibration		-				
	_	Wave/Tw	•	ie.		Fit/Function	-	1	equence		-				

Picklist Print

Tuesday, October 07, 2014 10:38:35 AM

Page 2

Work Order ID: 125227

125227

Parent Item:

D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 10/06/14

Required Date: 10/06/14

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured

220

Each 174.0000

D3670-4-200

Bushing

Location Loc Oty FG 10 87709 10 164 109108 164 Each

Loc Code

D3401-041

Manufactured

No

17.0000

Loc Code

Tow Cap Assembly

Location	Loc Qty
FP001	17
<u>109127</u>	7
92680	1
94116	1
94303	8

DQA:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / L	JPDATE			***	DART
QA Closed:			Date:								ork Order up	date only		AEROSPACE
Work Ord	er:					DISPOSITION				AGAINST DI	EPARTMENT,	/PROCESS		
Part I	•		A			Rework Scrap Use-as-is Suspected Unapproved			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-	Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Root					Desc	ription of work order update		Initial	Ad	ction	Sign &			· · · · · · · · · · · · · · · · · · ·
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Desc	cription	Date	Verification	۱	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved														,
							FA	ULT CAT	regory					
Landi		Gear Bending Centre No Cracks Crimp/Kir Cuffs Crushing Heat Trea Inspectio Marks/Ch Turning S	nk/Ripple at n Strip in natter	/Wave Tube		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	ion Incomplete/Uions Incomplete, gned/off center eled	/Unclear	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct ssing Vrong	Se Te W	ressure/Forced et-up emperature/Cure /eld /rong Stock Pulled ther
		Wave/Tw				Fit/Function		4	Sequence					

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Picklist Print Tuesday, October 07, 2014 10.	:38:35 AM						Page 3
Work Order ID: 125227			227*			•	
Parent Item: D3391-021		*D.3:	391-021*				
Parent Item Name: Fwd Tube	Assembly				Start Date:	10/06/14	Required Date: 10/06/14
					Start Qty:	1.00	Required Qty: 1.00
NAS1149C0332R	Purchased	No		Each	8,989.000	10	
NAS1149C03	332R				**		Il wholoz
		L	ocation	Loc Qty	Loc Code		•
		C	A	83			
			m129682	83			_
		S	r278	8906			
			122063	41			_
			125654	457			<u> </u>
			m126319	51			<u> </u>
			m127306	2065			<u> </u>
			m127831	26			_
			m128591	75			<u> </u>
			m129499	191		<u> </u>	<u> </u>
			m130325 m130466	5000 1000			
AN3C4A	Purchased	No	11130400	Each	905.0000	10	_
AN3C4A	1 di Oliubu				**	10	Al ylidoz
Bolt							of Gridos
		<u>L</u>	ocation	Loc Qty	Loc Code		
		F	3	20	VII 0716		
			122814	20	M130716	V / O	<u> </u>
		S	Г350	885			
			124221	12			
			M127410	1			
			M127832	62			
•			M128606	32		**-	·
			M128634	8			
			M128739	4			
			M128879 M129520	71 695		*****	
			111.27.320	093			_

DQA: Date:QA Closed: Date:					- ,	WORK ORDER NON	-C(ONFO	RMANCE / UPDA	TE				DART
QA Closed:			Date:								ork Order up	date only		AEROSPACE
Work Orde	er:		<u> </u>			DISPOSITION			A	GAINST DE	PARTMENT/	PROCESS		
Part N	_					Rework Scrap Use-as-is Suspected Unapproved		1	Machining Sn noforming F	osstube mall Fab inishing mposite	1	Water Jet d. Eng. Coor. e/Packaging Supplier	Eng	Other
Root	T	·			Desc	ription of work order update		Initial	Action		Sign &		7	· · · · · · · · · · · · · · · · · · ·
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Description	n	Date	Verification	Q	C Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved														
						······································	FA	ULT CAT	TEGORY					
Landi	B C C C C C C H	ending entre No racks rimp/Kir uffs rushing eat Trea nspection	n Strip in	/Wave		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	on Incomplete/Unqualitions Incomplete/Unclea ned/off center	fied	Outside Dime Over/Under Part Incorrec Part Lost/Mis Part Moved Positioned W Power Loss/S	tolerance It ssing /rong	Set-u Temp Weld	erature/Cure g Stock Pulled
	v	/ave/Tw	ist in Tub	e		Fit/Function		Out of S	Sequence					· · · · · · · · · · · · · · · · · · ·

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Picklist Print

Tuesday, October 07, 2014 10:38:35 AM

Work Order ID: 125227

125227

Parent Item:

D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 10/06/14

Required Date: 10/06/14

Page 4

Start Qty: 1.00

Required Qty: 1.00

D3672-1

Manufactured

Each

947.0000

D3672-1

Washer, Phenolic

	Location	Loc Oty	Loc Code	•
	FG	10		
	85222	10		
	ST055	937		
	113581	474		<u> </u>
	120116	421		
	80369	34	•	<u> </u>
	99099	8		
AELS-1032-225 AELS8-1032-225 Purchased No		Each	0.0000	10
AFI S-1032-225 X ALSH-103	2-225	M1305	79 **	(x10) Il 14/12/02

No

(x10) Il 14/12/02

DQA: Date:													
		_			WORK ORDER NON	-CC	ONFOR	RMANCE / U	PDATE				AEROSPACE
QA Closed:		Date:								W	ork Order up	odate only	
Work Order:					DISPOSITION		AGAINST DEPARTMENT/PROCESS						
					Rework	1		Skid-tube	Crosstube			Water Jet .	Engineering
Part N	0.				Scrap	Machining		Machining	Small Fab		Prod. Eng. Coor.		Quality
				:	Use-as-is		Thermoforming Finishing			Rec/Store/Packaging		Other	
NCR N	·				Suspected Unapproved			Large Fab	Composite		ļ	Supplier	
Root				Desci	ription of work order update		nitial	Ac	tion	•	Sign &		
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	QC Inspector
esign													
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		-l		·		FAL	JLT CAT	EGORY					
Landin	ng Gear				General			· · · · · · · · · · · · · · · · · · ·					
[Bending				Bend		Folio/P	rogram			Outside Dim	ensions	Pressure/Forced
[Centre Not Concentric			centric BOM/Route		Grain			Over/Under tolerance		Set-up		
[Cracks			. [Broken/Damage/Defect		Hardware			Part Incorrect		Temperature/Cure	
	Crimp/Kink/Ripple/Wave				Burrs		Inspection Incomplete/Unqualified			Part Lost/Missing		Weld	
	Cuffs				Contamination		Instructions Incomplete/Unclear			Part Moved		Wrong Stock Pulled	
	Crushing				Countersink		Misaligned/off center			Positioned Wrong			
	Heat Treat				Cut Too Short		Mislabeled			Power Loss/Surge		Other	
1	Inspection Strip in Tube				Drawing	\square	Misread	I					
1	Marks/Ch	natter	4		Drill Holes		Off-set						
1	Turning S				Finish		Out of C	Calibration					
	Wave/Twist in Tube				Fit/Function	1	Out of S	equence					

DART AEROSPACE LTD	Work Order: \	125227	
Description: Float Skidtube (412)	Part Number:	D3391-1	
Inspection Dwg: D3391 Rev: I		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.687	+0.010/-0.000	688	ن		Vem	21-06
3.590	+0.025/-0.010	3.610			1	14000
3.300	+0.040/-0.000	3,327				
1.429	+0.040/-0.060	1.425				
4.250	+/-0.010	4.250				
4.250	+/-0.010	4.250				
0.500	+/-0.010	.500				
			DAS			

			DAS		
Measured by:	and	Audited by:	44 9-89	Preliminary Approval:	
Date:	14/10/27	Date:	14/11/05	Date:	

Rev	Date	Change	Revised by Approve
Α	06.04.27	New Issue P/O D3391-011/-021	KJ/JLM
В	06.06.19	Tolerances revised per D3391 Rev. E	KJ/JLM
С	07.03.21	Dimensions removed per Dwg rev. F	KJ/JLM
D	07.11.23	Dwg Rev. updated	KJ/EC/DD
Ε	09.12.14	Dwg Rev updated	KJ
F	11.06.21	Dimension 0.500 added	KJ IN
G	12.05.15	Dwg Rev updated	KJ KJ

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